

## SPECIAL REPORT

## A long week in stem-cell politics...

Just days after US President George W. Bush vetoed a bill that would have significantly broadened federal funding for human embryonic stem-cell research, European Union ministers have given the green light to funding guidelines similar to the US proposal.

In a cliffhanger decision on 24 July, the EU council agreed to the inclusion of ethically approved human embryonic stem-cell research in its next round of research funding. The €50-billion (US\$63-billion) seventh Framework Programme for research (FP7) is due to start in January 2007, and runs until 2013.

But the council will not directly finance the destruction of human embryos. So researchers cannot use FP7 funding to derive their own cell lines from embryos left over from *in vitro* fertilization procedures, as can be done with national funding in the United Kingdom and Sweden. They must instead buy them from other sources.

The UK Royal Society expressed “disappointment” at the restriction. But others are happier. “I think this is an OK decision given this is Europe and we have to find compromise,” says Elena Cattaneo, a stem-cell researcher at the University of Milan in Italy.

Approval of most aspects of the research programme require a qualified majority vote, and there was much horse-trading as countries with restrictive stem-cell laws, particularly Germany, tried to set up a ‘blocking minority’ of countries. These apparently failed, but only at the last minute.

Austin Smith, incoming chair of the Institute for Stem Cell Biology in Cambridge, UK, says the issue is seen as broader than just stem cells. “The whole of science is under attack with the sorts of statements George Bush has been making, and with Germany trying to impose its own moral and cultural view over the entirety of European research,” he says. “These fundamentalist positions refuse to see the benefits of science — it’s like going back to the days of Galileo and the Church. There has been a huge sigh of relief in the research community in Europe this week.”

Across the Atlantic, researchers had no such reprieve, as Bush exercised the first veto of his almost six-year presidency on 19 July. “This bill would support the taking of innocent human life in the hope of finding medical benefits for others. It crosses a moral boundary that our decent society needs to respect, so I vetoed it,” Bush declared at a White House gathering that included babies ‘adopted’ as frozen embryos left over at fertility clinics. The same day, the US House of Representatives attempted to



R. EDMONDS/AP

President Bush believes that funding broader embryonic stem-cell research would cross “a moral boundary”.

override the veto, but failed to muster the two-thirds majority needed.

The veto prompted Republican Governor Arnold Schwarzenegger of California to announce a \$150-million loan the next day to jump-start that state’s \$3-billion stem-cell research programme, which has been stalled by legal wrangling. “We cannot fall behind the nations that make this life-saving science a priority,” says Schwarzenegger.

The vetoed bill, which passed the US Senate on a vote of 63 to 37 the day before Bush’s action, would have allowed federal funding for research on stem cells derived from embryos left over at fertility clinics and already slated for destruction. As in the European agreement, it would not have allowed funds to be used to derive cell lines from such embryos. Current law forbids US funding of all embryonic stem-cell research, except on 21 lines derived before 9 August 2001.

Supporters have vowed to resurrect the legislation. “Whether it’s this year, or with a new Senate and a new House and the next president, this will become the law of the United States,” Senator Charles Schumer (Democrat, New York) told a Capitol Hill rally.

Observers and research advocates say Bush’s action could cost Republicans politically in a country where polls show that at least 60% of the public support the research. “It’s a very risky strategy for Bush,” says leading US pollster John Zogby. “It makes him and

the Republicans appear to be anti-science.”

That the legislation reached the president’s desk at all in a Congress with both houses controlled by conservative Republicans speaks to the broad reach of diseases, from juvenile diabetes to Parkinson’s, for which the research holds promise. It is also testimony to the strength of the Coalition for the Advancement of Medical Research (CAMR), an umbrella group of disease and research advocacy groups that lobbied relentlessly for the bill.

“There’s never been a group strong enough to push back against the pro-life lobby in Congress. And this group did that,” notes Arthur Caplan, director of the Center for Bioethics at the University of Pennsylvania.

The coalition now says it hopes to use the failed bill to tip the balance in November’s close-run elections for Congress. “We’re going to do all we can to make this a campaign issue,” says Tony Mazzaschi of the Association of American Medical Colleges, a member of the CAMR. ■

Meredith Wadman and Alison Abbott

## THE COST OF RESTRICTIONS

Scientists argue that being unable to derive and work on new human embryonic stem-cell lines is a huge setback for medical research. With hundreds of such lines already in existence, why do researchers want so many, and what’s wrong with the old ones? See overleaf ▶